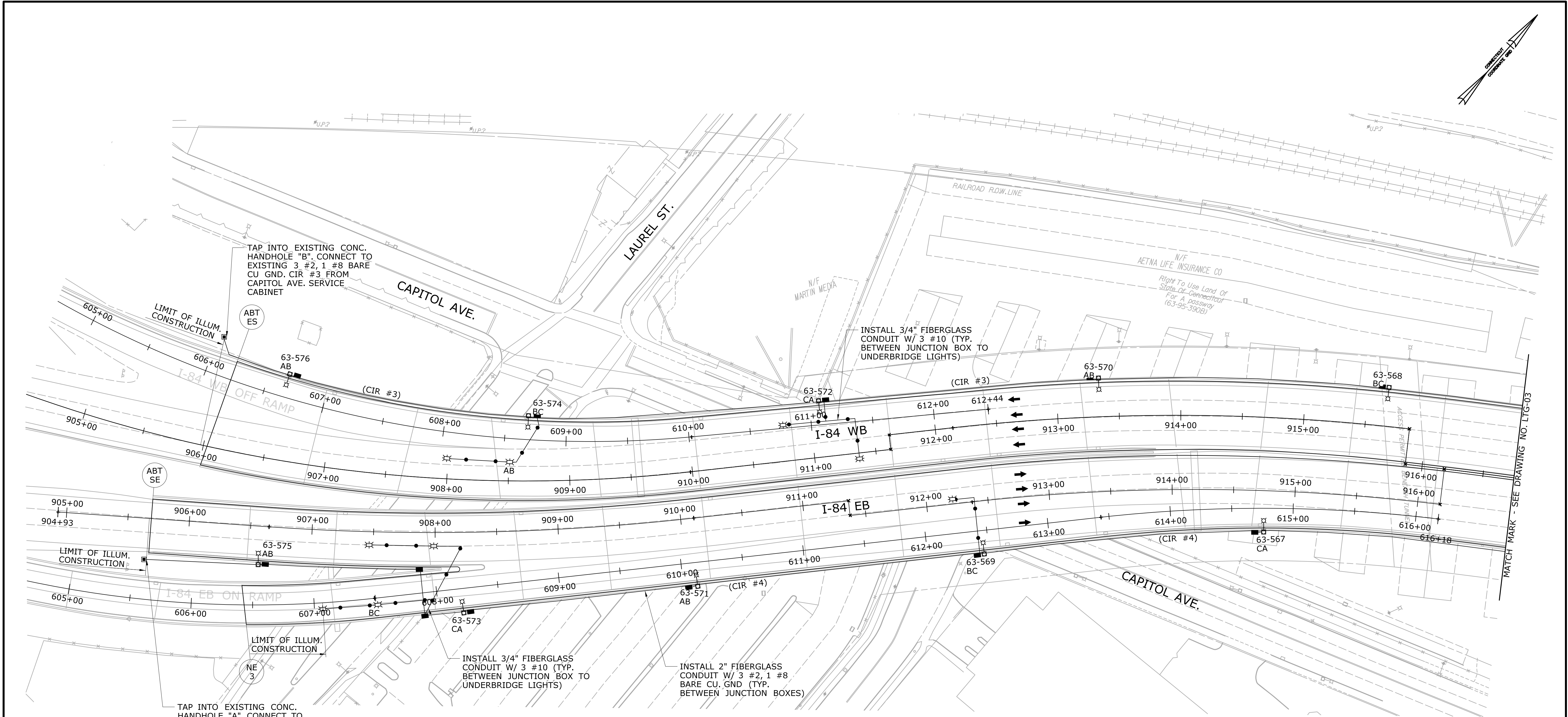









[illegible]

DESIGNED BY:  
HARDESTY & HANOVER, LLC  
NEW HAVEN, CT

[illegible]






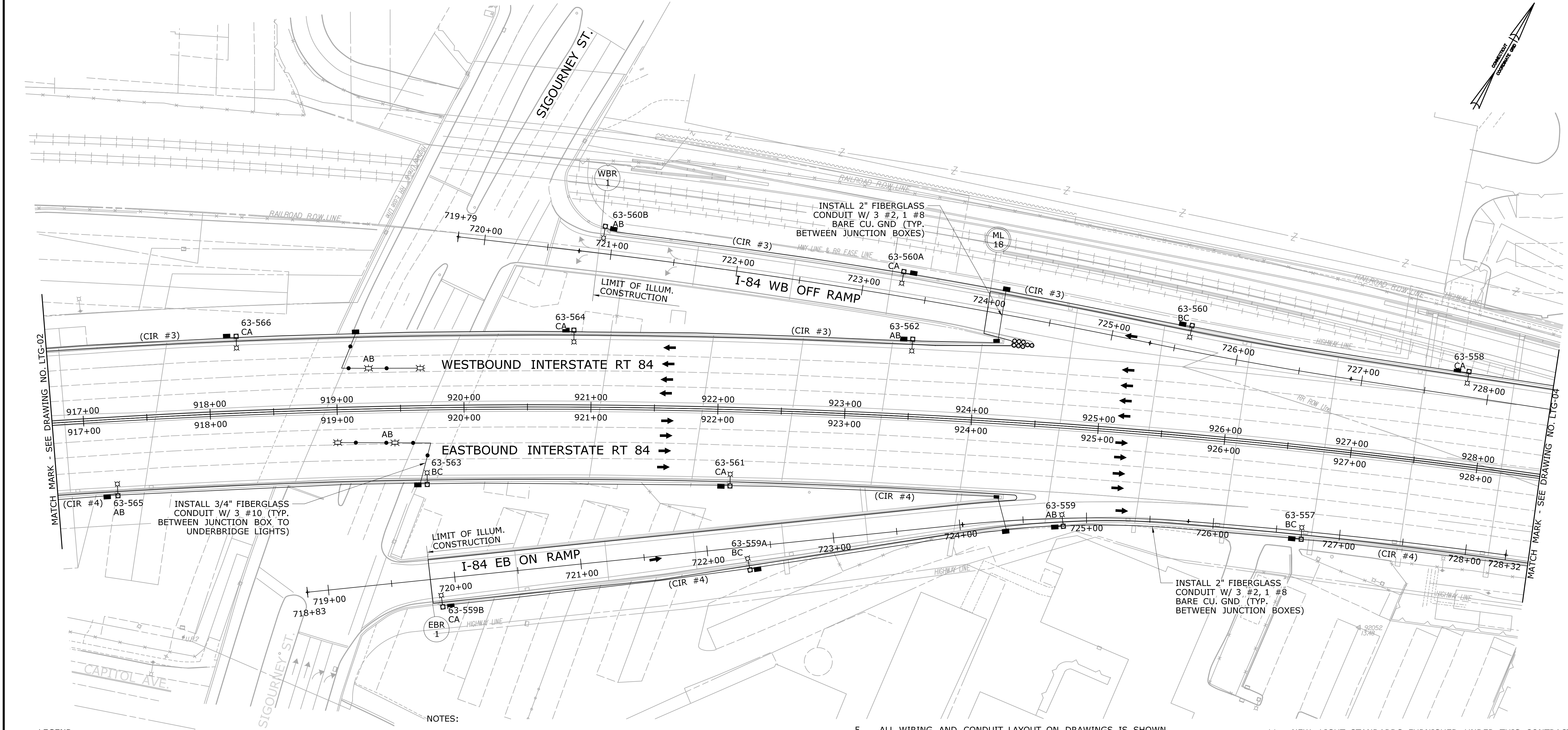
LEGEND:

-  EXISTING LIGHT POLE TO BE REMOVED AND MOUNTED ON NEW BRACKET. SEE NOTE 10.
-  16"x14"x6" FIBERGLASS JUNCTION BOX
-  EXISTING JUNCTION BOX TO REMAIN
-  EXISTING CONCRETE HANDHOLE TO REMAIN
-  NEW LED UNDERBRIDGE LUMINAIRE
-  2" FIBERGLASS CONDUIT, 3#2, 1#8 BARE CU GND
-  3/4" FIBERGLASS CONDUIT SURFACE MOUNTED W/3#10

NOTES:

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRIC CODE, CONNECTICUT STANDARD SPECIFICATIONS. ALL ITEMS OF LABOR, MATERIALS AND EQUIPMENTS NOT SHOWN ON DRAWINGS, BUT NECESSARY FOR COMPLETE INSTALLATION AND PROPER OPERATION OF WORK DESCRIBED, SHALL BE FURNISHED AND INSTALLED. COST OF ALL ITEMS SHALL BE INCLUDED IN THE BID PRICES.
- THE CONTRACTOR SHALL ORGANIZE HIS WORK SO THAT ANY PORTION OF THE ROADWAY WHICH HAS EXISTING NIGHTTIME ILLUMINATION AND IS OPEN FOR USE REMAINS LIGHTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STAGE THE INSTALLATION OF NEW LIGHTING CONDUITS AND CIRCUITRY IN SUCH A MANNER THAT THE EXISTING NIGHTTIME ILLUMINATION REMAINS OPERATIONAL.
- CONDUCTORS SHALL BE STRANDED COPPER WITH INSULATION TYPE XHHW AND RATED FOR 600 VOLTS. CONDUCTORS SHALL BE FACTORY COLOR CODED AS RED, BLACK, BLUE. ALL LIGHTING CIRCUITS SHALL HAVE ONE NO. 8 BARE COPPER GROUNDING CONDUCTOR. NO. 10 AWG CONDUCTORS FOR UNDERBRIDGE LIGHTING SHALL BE TYPE THWN.
- UNLESS OTHERWISE NOTED, ALL CONDUITS AND JUNCTION BOXES SHALL BE FIBERGLASS.
- ALL WIRING AND CONDUIT LAYOUT ON DRAWINGS IS SHOWN DIAGRAMMATICALLY. ACTUAL CONDUIT ROUTING TO FIXTURE TO BE DETERMINED BY ELECTRICAL CONTRACTOR AND COORDINATED WITH ALL TRADES.
- THE CONTRACTOR SHALL ABIDE BY THE CONNDOT LOCKOUT/TAGOUT PROCEDURES WHEN ACCESS TO A CIRCUIT IS REQUIRED. THE CONTRACTOR SHALL CONTACT THE DISTRICT ELECTRICAL SUPERVISOR AT 860-566-3156, WHEN ACCESS TO A CIRCUIT IS REQUIRED.
- EXISTING LIGHTING CIRCUITRY IS 480 VOLT, 3 PHASE.
- INSTALL LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LOCATIONS SUBJECT TO MOVEMENT OR EXPANSION.
- REMOVE AND DISPOSE OF EXISTING UNDERBRIDGE LIGHTS, SURFACE CONDUITS AND CONDUCTORS.
- THIS CONTRACT INCLUDES 5 NEW LIGHT STANDARDS AND LUMINAIRES THAT THE CONTRACTOR MAY FURNISH AND INSTALL TO PERMIT STAGED RELOCATION OF THE LIGHT STANDARDS AND REPLACEMENT OF THE CIRCUITRY. REMOVAL AND SALVAGE OF EXISTING LIGHT STANDARDS AT LOCATIONS WHERE A NEW LIGHT STANDARD IS TO BE INSTALLED SHALL BE INCLUDED IN THE ITEM "REMOVE LIGHT STANDARD".
- NEW LIGHT STANDARDS FURNISHED UNDER THIS CONTRACT MAY BE INSTALLED AT BRIDGE SITE NO. 1, 2, OR 3. SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF BRIDGE SITES.
- SURFACE MOUNTED FIBERGLASS CONDUIT SUPPORT SPACING SHALL NOT EXCEED 3'-0" AS PER N.E.C. 352.30(B). WHEN THE FIBERGLASS CONDUIT LENGTH IS BETWEEN 50' AND 200' INSTALL TWO CONDUIT EXPANSION FITTINGS EQUALLY SPACED FROM EACH OTHER AND THE ENDS OF THE CONDUIT RUN. CONDUIT EXPANSION FITTINGS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURERS INSTALLATION GUIDELINES.
- LUMINAIRES ON NEW LIGHT STANDARDS ARE 250W HPS, TYPE III, SEMI-CUTOFF.

|      |  |      |                      |           |                        |   |   |   |  |  |   |
|------|--|------|----------------------|-----------|------------------------|---|---|---|--|--|---|
| REV. |  | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/5/2016 | DESIGNER/DRAFTER:<br><b>MD</b><br>CHECKED BY:<br><b>SDH</b><br>SCALE IN FEET<br>0 40 80<br>SCALE 1"=40' | <br><b>STATE OF CONNECTICUT</b><br><b>DEPARTMENT OF TRANSPORTATION</b><br>Filename: ...\\LTG-02_63-699.dgn | SIGNATURE/<br>BLOCK:<br><br>Hardesty & Hanover, LLC<br>89 Elm Street<br>New Haven, CT 06510<br> | PROJECT TITLE:<br><b>BRIDGE NOS. 03160A-D, 03301, AND 03303 I-84 EB AND WB OVER AMTRAK AND LOCAL ROADS (AETNA VIADUCT)</b> | TOWN:<br><b>HARTFORD</b><br>DRAWING TITLE:<br><b>LIGHTING PLAN - 1</b> | PROJECT NO.<br><b>063-699</b><br>DRAWING NO.<br><b>LTG-02</b><br>SHEET NO.<br><b>01.10.02</b> |
|------|--|------|----------------------|-----------|------------------------|---|---|---|--|--|---|



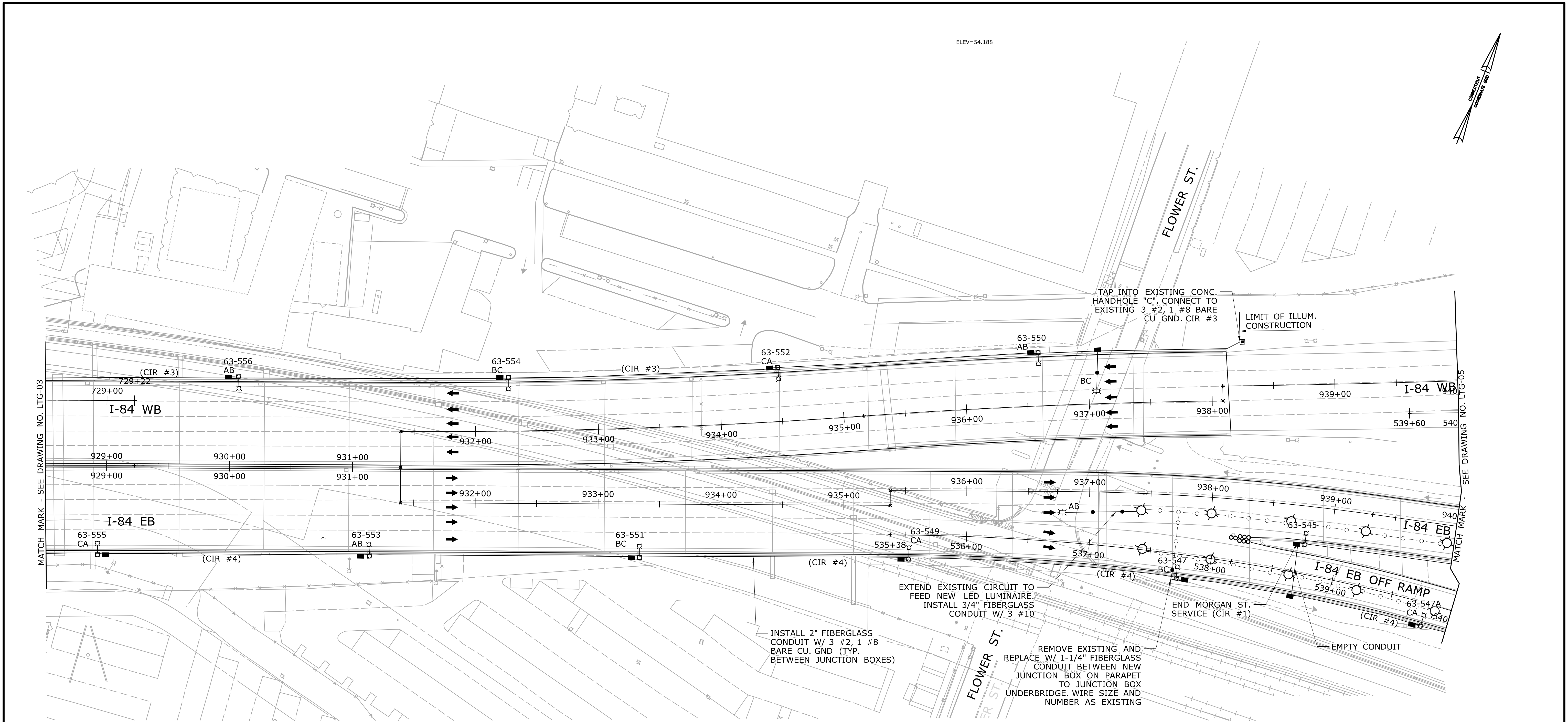
LEGEND:

- EXISTING LIGHT POLE TO BE REMOVED AND MOUNTED ON NEW BRACKET. SEE NOTE 10.
- 16"x14"x6" FIBERGLASS JUNCTION BOX
- EXISTING JUNCTION BOX TO REMAIN
- EXISTING CONCRETE HANDHOLE TO REMAIN
- NEW LED UNDERBRIDGE LUMINAIRE
- 2" FIBERGLASS CONDUIT, 3#2, 1#8 BARE CU GND
- 3/4" FIBERGLASS CONDUIT SURFACE MOUNTED W/3#10

NOTES:

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRIC CODE, CONNECTICUT STANDARD SPECIFICATIONS. ALL ITEMS OF LABOR, MATERIALS AND EQUIPMENTS NOT SHOWN ON DRAWINGS, BUT NECESSARY FOR COMPLETE INSTALLATION AND PROPER OPERATION OF WORK DESCRIBED, SHALL BE FURNISHED AND INSTALLED. COST OF ALL ITEMS SHALL BE INCLUDED IN THE BID PRICES.
- THE CONTRACTOR SHALL ORGANIZE HIS WORK SO THAT ANY PORTION OF THE ROADWAY WHICH HAS EXISTING NIGHTTIME ILLUMINATION AND IS OPEN FOR USE REMAINS LIGHTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STAGE THE INSTALLATION OF NEW LIGHTING CONDUITS AND CIRCUITRY IN SUCH A MANNER THAT THE EXISTING NIGHTTIME ILLUMINATION REMAINS OPERATIONAL.
- CONDUCTORS SHALL BE STRANDED COPPER WITH INSULATION TYPE XHHW AND RATED FOR 600 VOLTS. CONDUCTORS SHALL BE FACTORY COLOR CODED AS RED, BLACK, BLUE. ALL LIGHTING CIRCUITS SHALL HAVE ONE NO. 8 BARE COPPER GROUNDING CONDUCTOR. NO. 10 AWG CONDUCTORS FOR UNDERBRIDGE LIGHTING SHALL BE TYPE THWN.
- UNLESS OTHERWISE NOTED, ALL CONDUITS AND JUNCTION BOXES SHALL BE FIBERGLASS.
- ALL WIRING AND CONDUIT LAYOUT ON DRAWINGS IS SHOWN DIAGRAMMATICALLY. ACTUAL CONDUIT ROUTING TO FIXTURE TO BE DETERMINED BY ELECTRICAL CONTRACTOR AND COORDINATED WITH ALL TRADES.
- THE CONTRACTOR SHALL ABIDE BY THE CONNDOT LOCKOUT/TAGOUT PROCEDURES WHEN ACCESS TO A CIRCUIT IS REQUIRED. THE CONTRACTOR SHALL CONTACT THE DISTRICT ELECTRICAL SUPERVISOR AT 860-566-3156, WHEN ACCESS TO A CIRCUIT IS REQUIRED.
- EXISTING LIGHTING CIRCUITRY IS 480 VOLT, 3 PHASE.
- INSTALL LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LOCATIONS SUBJECT TO MOVEMENT OR EXPANSION.
- REMOVE AND DISPOSE OF EXISTING UNDERBRIDGE LIGHTS, SURFACE CONDUITS AND CONDUCTORS.
- THIS CONTRACT INCLUDES 5 NEW LIGHT STANDARDS AND LUMINAIRES THAT THE CONTRACTOR MAY FURNISH AND INSTALL TO PERMIT STAGED RELOCATION OF THE LIGHT STANDARDS AND REPLACEMENT OF THE CIRCUITRY. REMOVAL AND SALVAGE OF EXISTING LIGHT STANDARDS AT LOCATIONS WHERE A NEW LIGHT STANDARD IS TO BE INSTALLED SHALL BE INCLUDED IN THE ITEM "REMOVE LIGHT STANDARD".
- NEW LIGHT STANDARDS FURNISHED UNDER THIS CONTRACT MAY BE INSTALLED AT BRIDGE SITE NO. 1, 2, OR 3. SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF BRIDGE SITES.
- SURFACE MOUNTED FIBERGLASS CONDUIT SUPPORT SPACING SHALL NOT EXCEED 3'-0" AS PER N.E.C. 352.30(B). WHEN THE FIBERGLASS CONDUIT LENGTH IS BETWEEN 50' AND 200' INSTALL TWO CONDUIT EXPANSION FITTINGS EQUALLY SPACED FROM EACH OTHER AND THE ENDS OF THE CONDUIT RUN. CONDUIT EXPANSION FITTINGS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURERS INSTALLATION GUIDELINES.
- LUMINAIRES ON NEW LIGHT STANDARDS ARE 250W HPS, TYPE III, SEMI-CUTOFF.

|      |      |                      |           |   |  |   |  |   |  |  |                               |
|------|------|----------------------|-----------|---|--|---|--|---|--|--|-------------------------------|
|      |      |                      |           | THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. |  | DESIGNER/DRAFTER:<br><b>MD</b><br>CHECKED BY:<br><b>SDH</b><br>SCALE IN FEET<br>0 40 80<br>SCALE 1"=40' | <br><b>STATE OF CONNECTICUT<br/>DEPARTMENT OF TRANSPORTATION</b><br>Filename: ...\\LTG-03-63-699.dgn | SIGNATURE/<br>BLOCK:<br><br>Hardesty & Hanover, LLC<br>59 Elm Street<br>New Haven, CT 06510<br> | PROJECT TITLE:<br><b>BRIDGE NOS. 03160A-D, 03301, AND<br/>03303 I-84 EB AND WB OVER AMTRAK<br/>AND LOCAL ROADS (AETNA VIADUCT)</b> | TOWN:<br><b>HARTFORD</b>                       | PROJECT NO.<br><b>063-699</b> |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/5/2016  |  |   |  |   |  | DRAWING TITLE:<br><b>LIGHTING<br/>PLAN - 2</b> | SHEET NO.<br><b>01.10.03</b>  |



LEGEND:

- EXISTING LIGHT POLE TO BE REMOVED AND MOUNTED ON NEW BRACKET. SEE NOTE 10.
- 16"x14"x6" FIBERGLASS JUNCTION BOX
- EXISTING JUNCTION BOX TO REMAIN
- EXISTING CONCRETE HANDHOLE TO REMAIN
- NEW LED UNDERBRIDGE LUMINAIRE
- 2" FIBERGLASS CONDUIT, 3#2, 1#8 BARE CU GND
- 3/4" FIBERGLASS CONDUIT SURFACE MOUNTED W/3#10
- EXISTING UNDERBRIDGE LUMINAIRE TO REMAIN
- EXISTING UNDERBRIDGE CONDUIT TO REMAIN

NOTES:

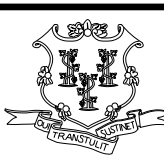
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRIC CODE, CONNECTICUT STANDARD SPECIFICATIONS. ALL ITEMS OF LABOR, MATERIALS AND EQUIPMENTS NOT SHOWN ON DRAWINGS, BUT NECESSARY FOR COMPLETE INSTALLATION AND PROPER OPERATION OF WORK DESCRIBED, SHALL BE FURNISHED AND INSTALLED. COST OF ALL ITEMS SHALL BE INCLUDED IN THE BID PRICES.
- THE CONTRACTOR SHALL ORGANIZE HIS WORK SO THAT ANY PORTION OF THE ROADWAY WHICH HAS EXISTING NIGHTTIME ILLUMINATION AND IS OPEN FOR USE REMAINS LIGHTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STAGE THE INSTALLATION OF NEW LIGHTING CONDUITS AND CIRCUITRY IN SUCH A MANNER THAT THE EXISTING NIGHTTIME ILLUMINATION REMAINS OPERATIONAL.
- CONDUCTORS SHALL BE STRANDED COPPER WITH INSULATION TYPE XHHW AND RATED FOR 600 VOLTS. CONDUCTORS SHALL BE FACTORY COLOR CODED AS RED, BLACK, BLUE. ALL LIGHTING CIRCUITS SHALL HAVE ONE NO. 8 BARE COPPER GROUNDING CONDUCTOR. NO. 10 AWG CONDUCTORS FOR UNDERBRIDGE LIGHTING SHALL BE TYPE THWN.
- UNLESS OTHERWISE NOTED, ALL CONDUITS AND JUNCTION BOXES SHALL BE FIBERGLASS.


- ALL WIRING AND CONDUIT LAYOUT ON DRAWINGS IS SHOWN DIAGRAMMATICALLY. ACTUAL CONDUIT ROUTING TO FIXTURE TO BE DETERMINED BY ELECTRICAL CONTRACTOR AND COORDINATED WITH ALL TRADES.
- THE CONTRACTOR SHALL ABIDE BY THE CONNDOT LOCKOUT/TAGOUT PROCEDURES WHEN ACCESS TO A CIRCUIT IS REQUIRED. THE CONTRACTOR SHALL CONTACT THE DISTRICT ELECTRICAL SUPERVISOR AT 860-566-3156, WHEN ACCESS TO A CIRCUIT IS REQUIRED.
- EXISTING LIGHTING CIRCUITRY IS 480 VOLT, 3 PHASE.
- INSTALL LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LOCATIONS SUBJECT TO MOVEMENT OR EXPANSION.
- REMOVE AND DISPOSE OF EXISTING UNDERBRIDGE LIGHTS, SURFACE CONDUITS AND CONDUCTORS.
- THIS CONTRACT INCLUDES 5 NEW LIGHT STANDARDS AND LUMINAIRES THAT THE CONTRACTOR MAY FURNISH AND INSTALL TO PERMIT STAGED RELOCATION OF THE LIGHT STANDARDS AND REPLACEMENT OF THE CIRCUITRY. REMOVAL AND SALVAGE OF EXISTING LIGHT STANDARDS AT LOCATIONS WHERE A NEW LIGHT STANDARD IS TO BE INSTALLED SHALL BE INCLUDED IN THE ITEM "REMOVE LIGHT STANDARD".

- NEW LIGHT STANDARDS FURNISHED UNDER THIS CONTRACT MAY BE INSTALLED AT BRIDGE SITE NO. 1, 2, OR 3. SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF BRIDGE SITES.
- SURFACE MOUNTED FIBERGLASS CONDUIT SUPPORT SPACING SHALL NOT EXCEED 3'-0" AS PER N.E.C. 352.30(B). WHEN THE FIBERGLASS CONDUIT LENGTH IS BETWEEN 50' AND 200' INSTALL TWO CONDUIT EXPANSION FITTINGS EQUALLY SPACED FROM EACH OTHER AND THE ENDS OF THE CONDUIT RUN. CONDUIT EXPANSION FITTINGS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURERS INSTALLATION GUIDELINES.
- LUMINAIRES ON NEW LIGHT STANDARDS ARE 250W HPS, TYPE III, SEMI-CUTOFF.

|      |      |                      |           |                        |
|------|------|----------------------|-----------|------------------------|
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/5/2016 |
|      |      |                      |           |                        |
|      |      |                      |           |                        |
|      |      |                      |           |                        |
|      |      |                      |           |                        |

|  |
|--|
| DESIGNER/DRAFTER:<br><b>MD</b>           |
| CHECKED BY:<br><b>SDH</b>                |
| SCALE IN FEET<br>0 40 80<br>SCALE 1"=40' |


**STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION**



Filename: ...LTG-04-63-699.dgn

SIGNATURE/  
BLOCK:



Hardesty & Hanover, LLC  
89 Elm Street  
New Haven, CT 06510  


PROJECT TITLE:

**BRIDGE NOS. 03160A-D, 03301, AND  
03303 I-84 EB AND WB OVER AMTRAK  
AND LOCAL ROADS (AETNA VIADUCT)**

TOWN:

**HARTFORD**

DRAWING TITLE:

**LIGHTING  
PLAN - 3**

PROJECT NO.

**063-699**

DRAWING NO.

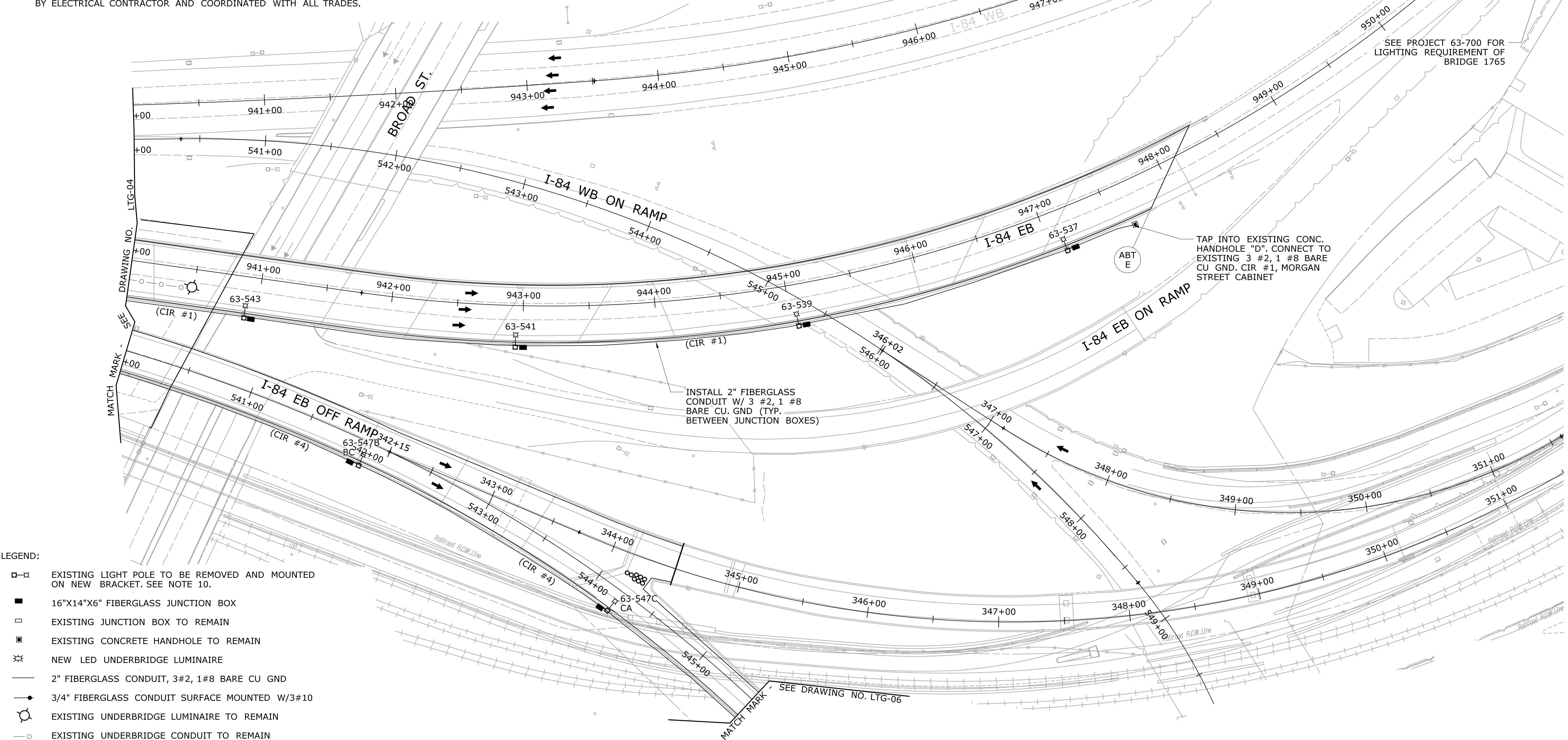
**LTG-04**

SHEET NO.

**01.10.04**

NOTES:

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRIC CODE, CONNECTICUT STANDARD SPECIFICATIONS. ALL ITEMS OF LABOR, MATERIALS AND EQUIPMENTS NOT SHOWN ON DRAWINGS, BUT NECESSARY FOR COMPLETE INSTALLATION AND PROPER OPERATION OF WORK DESCRIBED, SHALL BE FURNISHED AND INSTALLED. COST OF ALL ITEMS SHALL BE INCLUDED IN THE BID PRICES.
- THE CONTRACTOR SHALL ORGANIZE HIS WORK SO THAT ANY PORTION OF THE ROADWAY WHICH HAS EXISTING NIGHTTIME ILLUMINATION AND IS OPEN FOR USE REMAINS LIGHTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STAGE THE INSTALLATION OF NEW LIGHTING CONDUITS AND CIRCUITRY IN SUCH A MANNER THAT THE EXISTING NIGHTTIME ILLUMINATION REMAINS OPERATIONAL.
- CONDUCTORS SHALL BE STRANDED COPPER WITH INSULATION TYPE XHHW AND RATED FOR 600 VOLTS. CONDUCTORS SHALL BE FACTORY COLOR CODED AS RED, BLACK, BLUE. ALL LIGHTING CIRCUITS SHALL HAVE ONE NO. 8 BARE COPPER GROUNDING CONDUCTOR. NO. 10 AWG CONDUCTORS FOR UNDERBRIDGE LIGHTING SHALL BE TYPE THWN.
- UNLESS OTHERWISE NOTED, ALL CONDUITS AND JUNCTION BOXES SHALL BE FIBERGLASS.
- ALL WIRING AND CONDUIT LAYOUT ON DRAWINGS IS SHOWN DIAGRAMMATICALLY. ACTUAL CONDUIT ROUTING TO FIXTURE TO BE DETERMINED BY ELECTRICAL CONTRACTOR AND COORDINATED WITH ALL TRADES.
- THE CONTRACTOR SHALL ABIDE BY THE CONNDOT LOCKOUT/TAGOUT PROCEDURES WHEN ACCESS TO A CIRCUIT IS REQUIRED. THE CONTRACTOR SHALL CONTACT THE DISTRICT ELECTRICAL SUPERVISOR AT 860-566-3156, WHEN ACCESS TO A CIRCUIT IS REQUIRED.
- EXISTING LIGHTING CIRCUITRY IS 480 VOLT, 3 PHASE.
- INSTALL LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LOCATIONS SUBJECT TO MOVEMENT OR EXPANSION.
- REMOVE AND DISPOSE OF EXISTING UNDERBRIDGE LIGHTS, SURFACE CONDUITS AND CONDUCTORS.
- THIS CONTRACT INCLUDES 5 NEW LIGHT STANDARDS AND LUMINAIRES THAT THE CONTRACTOR MAY FURNISH AND INSTALL TO PERMIT STAGED RELOCATION OF THE LIGHT STANDARDS AND REPLACEMENT OF THE CIRCUITRY. REMOVAL AND SALVAGE OF EXISTING LIGHT STANDARDS AT LOCATIONS WHERE A NEW LIGHT STANDARD IS TO BE INSTALLED SHALL BE INCLUDED IN THE ITEM "REMOVE LIGHT STANDARD".
- NEW LIGHT STANDARDS FURNISHED UNDER THIS CONTRACT MAY BE INSTALLED AT BRIDGE SITE NO. 1, 2, OR 3. SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF BRIDGE SITES.
- SURFACE MOUNTED FIBERGLASS CONDUIT SUPPORT SPACING SHALL NOT EXCEED 3'-0" AS PER N.E.C. 352.30(B). WHEN THE FIBERGLASS CONDUIT LENGTH IS BETWEEN 50' AND 200' INSTALL TWO CONDUIT EXPANSION FITTINGS EQUALLY SPACED FROM EACH OTHER AND THE ENDS OF THE CONDUIT RUN. CONDUIT EXPANSION FITTINGS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURERS INSTALLATION GUIDELINES.
- LUMINAIRES ON NEW LIGHT STANDARDS ARE 250W HPS, TYPE III, SEMI-CUTOFF.



LEGEND:

- EXISTING LIGHT POLE TO BE REMOVED AND MOUNTED ON NEW BRACKET. SEE NOTE 10.
- 16\"X14\"X6\" FIBERGLASS JUNCTION BOX
- EXISTING JUNCTION BOX TO REMAIN
- EXISTING CONCRETE HANDHOLE TO REMAIN
- NEW LED UNDERBRIDGE LUMINAIRE
- 2\" FIBERGLASS CONDUIT, 3#2, 1#8 BARE CU GND
- 3/4\" FIBERGLASS CONDUIT SURFACE MOUNTED W/3#10
- EXISTING UNDERBRIDGE LUMINAIRE TO REMAIN
- EXISTING UNDERBRIDGE CONDUIT TO REMAIN

| REV. | DATE | REVISION DESCRIPTION | SHEET NO. |
|------|------|----------------------|-----------|
|      |      |                      |           |
|      |      |                      |           |
|      |      |                      |           |
|      |      |                      |           |

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 7/5/2016

DESIGNER/DRAFTER:

MD

CHECKED BY:

SDH

SCALE IN FEET

0 40 80

SCALE 1\"=40'



STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

Filename: ...\\LTG-05\_63-699.dgn

SIGNATURE/

BLOCK:



Hardesty & Hanover, LLC  
59 Elm Street  
New Haven, CT 06510  
Hardesty  
& Hanover

PROJECT TITLE:

BRIDGE NOS. 03160A-D, 03301, AND  
03303 I-84 EB AND WB OVER AMTRAK  
AND LOCAL ROADS (AETNA VIADUCT)

TOWN:

HARTFORD

DRAWING TITLE:

LIGHTING  
PLAN - 4

PROJECT NO.

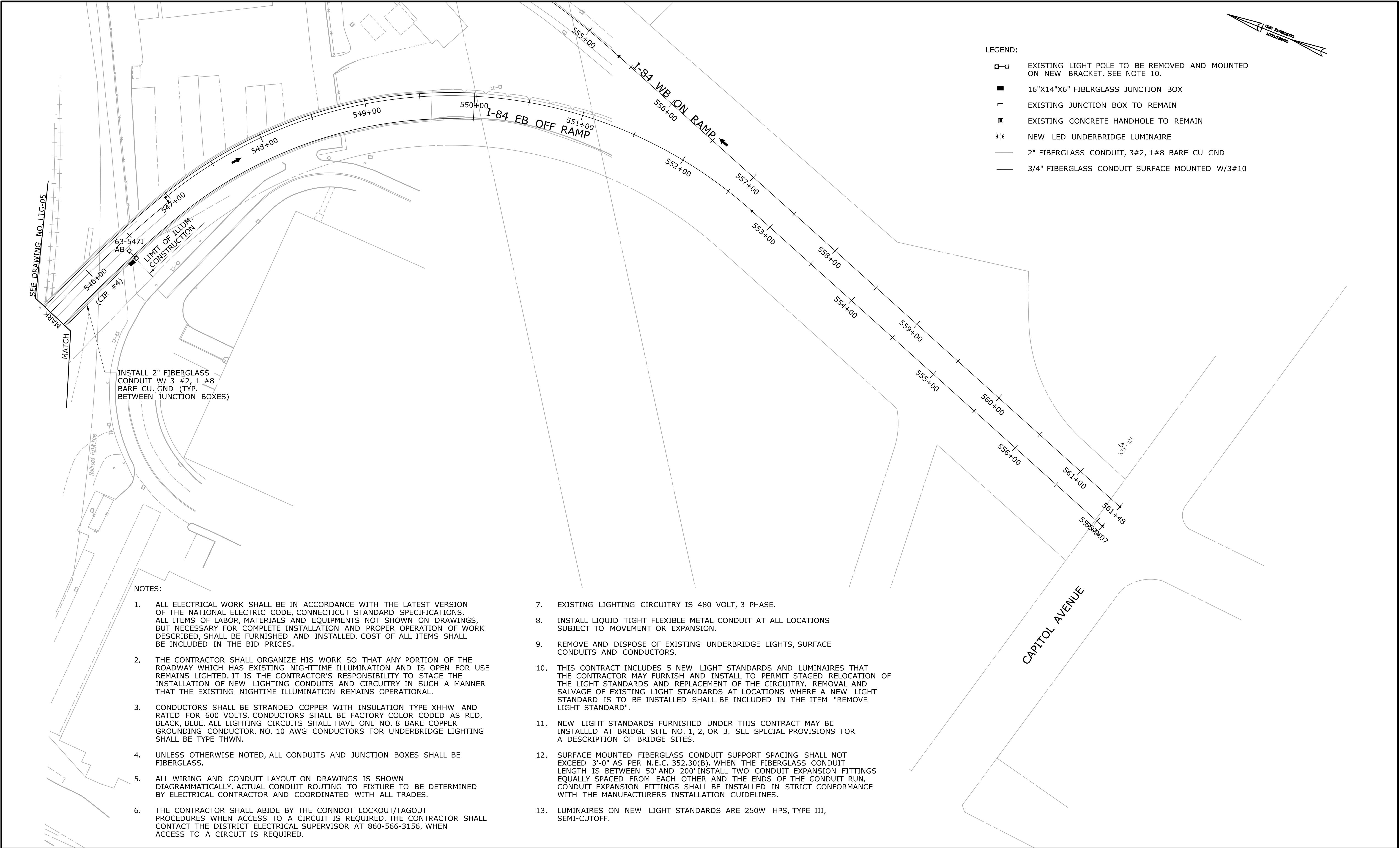
063-699



DRAWING NO.

LTG-05

SHEET NO.

01.10.05



|      |      |                      |  |   |                        |  |  |   |  |  |  |  |  |                              |  |                               |  |
|------|------|----------------------|--|---|------------------------|--|--|---|--|--|--|--|--|------------------------------|--|-------------------------------|--|
|      |      |                      |  | THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. |                        | <div>DESIGNER/DRAFTER:<br/><b>MD</b></div> <div>CHECKED BY:<br/><b>SDH</b></div> <div>SCALE IN FEET<br/>0 40 80<br/>SCALE 1"=40'</div> |  | <div><b>STATE OF CONNECTICUT</b><br/><b>DEPARTMENT OF TRANSPORTATION</b></div> <div>Filename: ...\\LTG-06-63-699.dgn</div> |  | <div>SIGNATURE/<br/>BLOCK:<br/><br/>Hardesty &amp; Hanover, LLC<br/>89 Elm Street<br/>New Haven, CT 06510</div> |  | PROJECT TITLE:<br><b>BRIDGE NOS. 03160A-D, 03301, AND 03303 I-84 EB AND WB OVER AMTRAK AND LOCAL ROADS (AETNA VIADUCT)</b> |  | TOWN:<br><b>HARTFORD</b>     |  | PROJECT NO.<br><b>063-699</b> |  |
|      |      |                      |  |   |                        |  |  |   |  |  |  | DRAWING TITLE:<br><b>LIGHTING PLAN - 5</b>   |  | DRAWING NO.<br><b>LTG-06</b> |  |                               |  |
|      |      |                      |  |   |                        |  |  |   |  |  |  |  |  | SHEET NO.<br><b>01.10.06</b> |  |                               |  |
| REV. | DATE | REVISION DESCRIPTION |  | SHEET NO.   | Plotted Date: 7/5/2016 |  |  |   |  |  |  |  |  |                              |  |                               |  |

STEEL PLATE TO BE ATTACHED TO BRIDGE DECK  
USING CONNECTICUT D.O.T. APPROVED MECHANICAL  
ANCHOR (2). THREADED ROD SHALL BE 1/2" IN  
DIAMETER, HOT DIP GALVANIZED PER A.S.T.M. - A123.  
MECHANICAL ANCHOR SHALL BE INSTALLED IN STRICT  
CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.

NOTE:  
ENTIRE PLATE ASSEMBLY  
TO BE HOT DIP GALVANIZED  
PER A.S.T.M. A123 AFTER  
FABRICATION

10"

10"

5"

1"

1"

4"

4"

10"

1/4"

1/4"

5"

1/4" THREADED COUPLING

DRILL AND TAP  
1/4" - 20 N.C.




7/16"

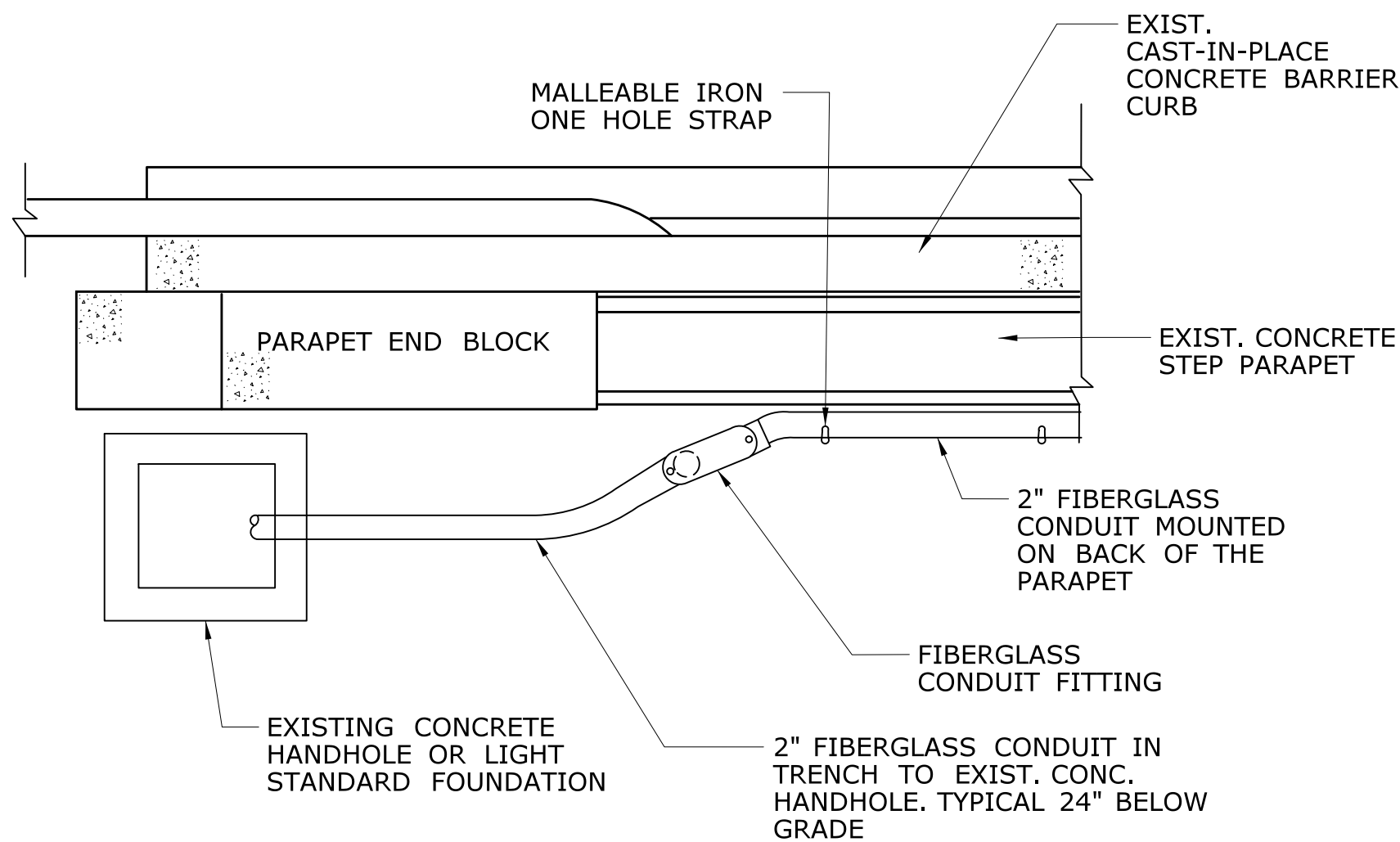
DRILL 9/16" DIA. HOLE  
(TYP. FOUR CORNERS)

STEEL PLATE FOR PENDANT LUMINAIRE

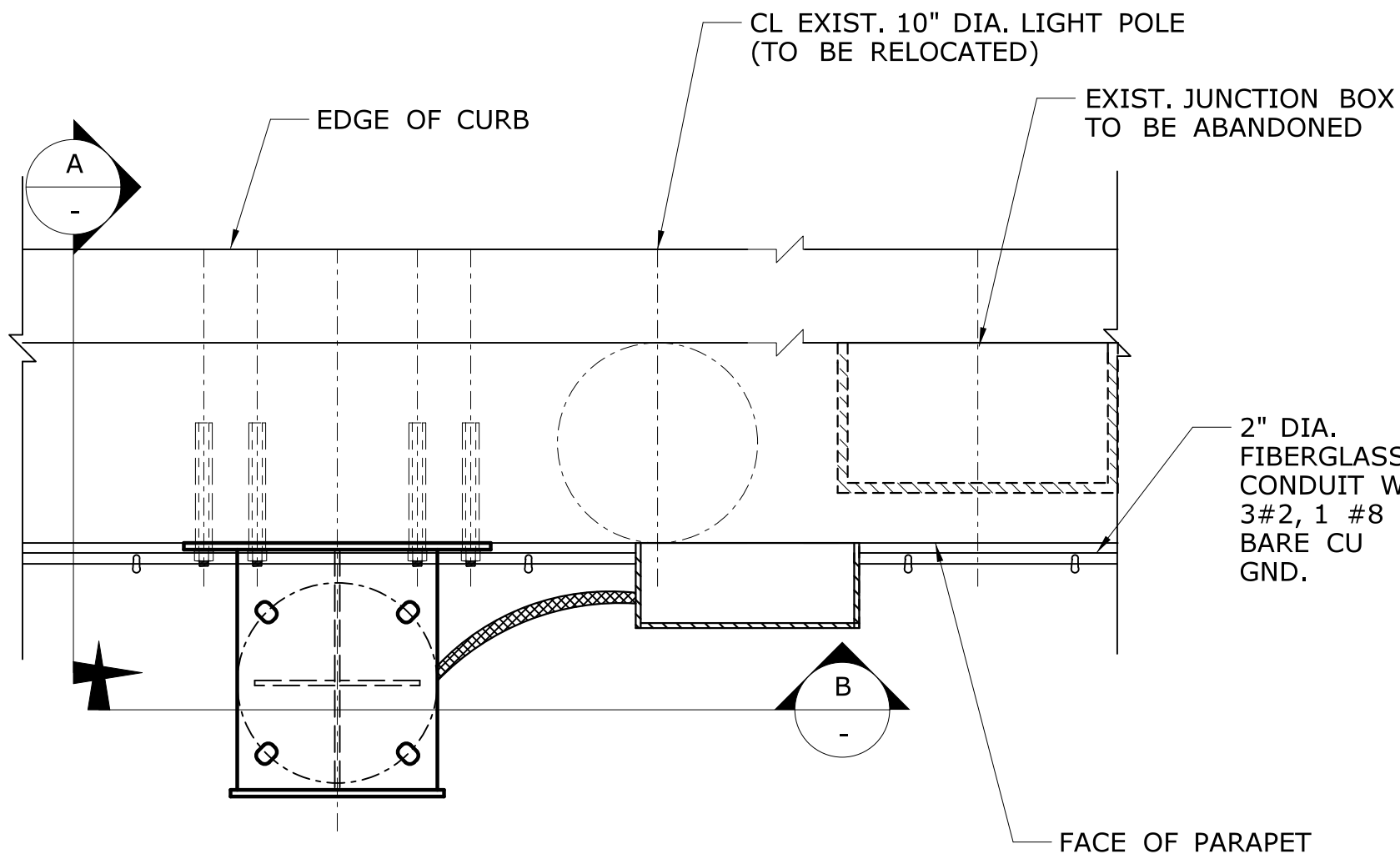
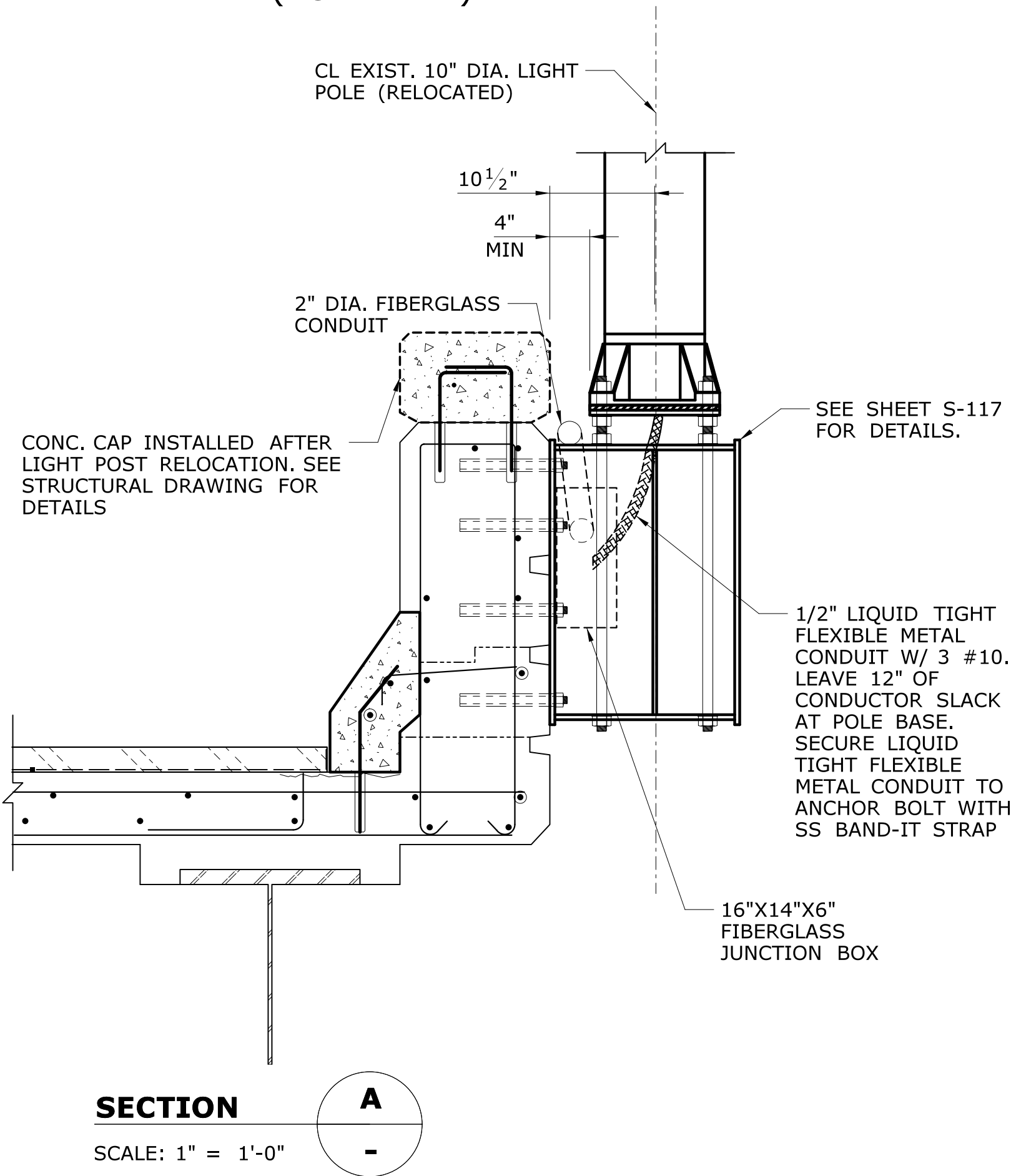


1. EXISTING LIGHTING CIRCUITRY IS 480 VOLT, 3 PHASE.
2. ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, CONNECTICUT STANDARD SPECIFICATIONS, AND WHERE APPLICABLE, UTILITY COMPANY REGULATIONS.
3. CONDUCTORS SHALL BE COPPER, INSULATION TYPE THWN AND RATED FOR 600 VOLTS. INSULATION SHALL BE FULL LENGTH FACTORY COLOR CODED AS FOLLOWS: RED, BLACK, BLUE.
4. THE CONTRACTOR SHALL ABIDE BY THE CONNDOT LOCKOUT/TAGOUT PROCEDURES. THE CONTRACTOR SHALL CONTACT THE DISTRICT ELECTRICAL SUPERVISOR AT TELEPHONE (860) 566-3156, WHEN ACCESS TO A CIRCUIT IS REQUIRED AND TO MARK-OUT EXISTING UNDERGROUND LIGHTING CIRCUITS.
5. REMOVE AND DISPOSE OF EXISTING UNDERBRIDGE LIGHTS, SURFACE CONDUIT AND CONDUCTORS.
6. INSTALL 3#4" LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LOCATIONS SUBJECT TO MOVEMENT OR EXPANSION.

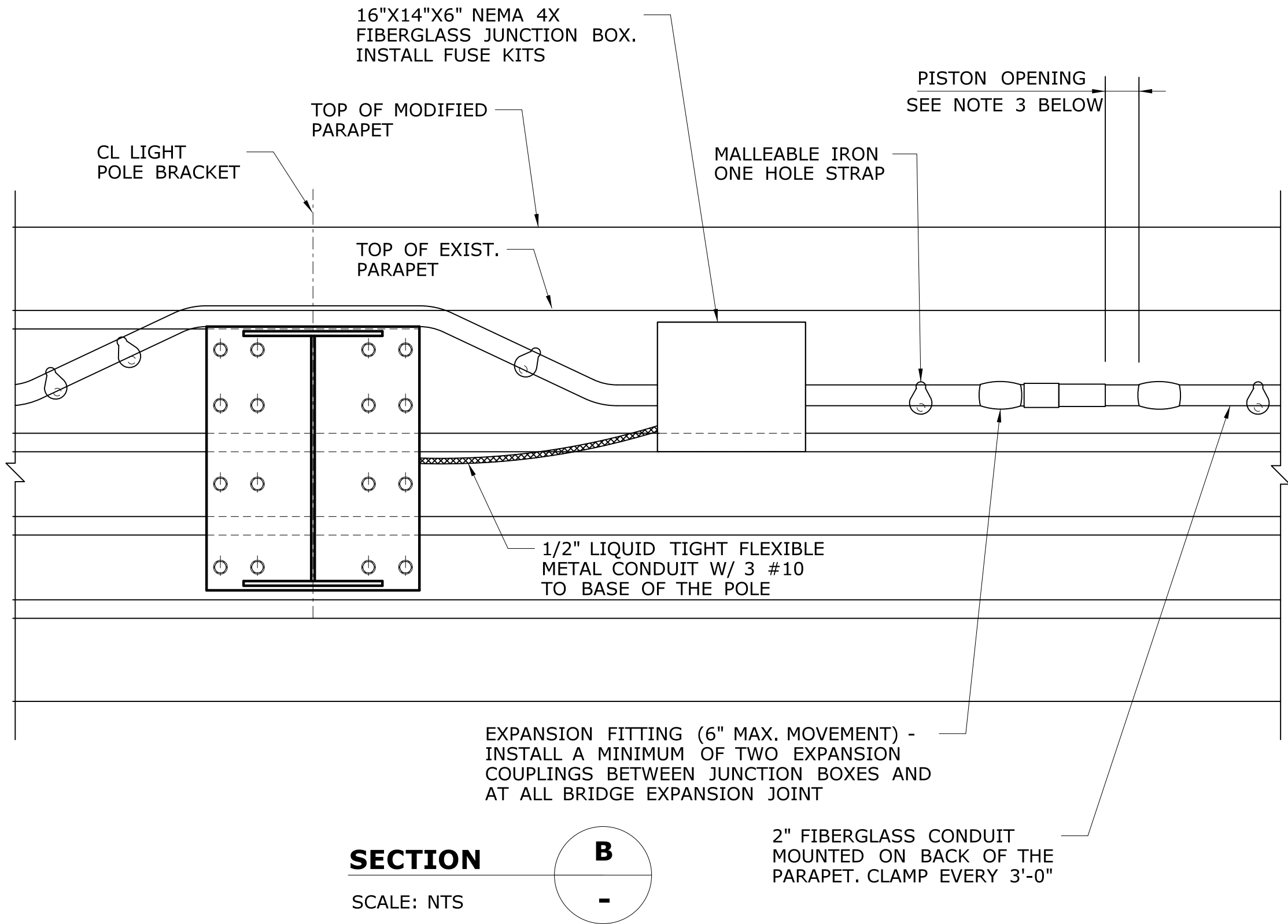
|      |      |                      |           |                        |   |                                |   |                                  |   |  |                            |                              |                              |
|------|------|----------------------|-----------|------------------------|---|--------------------------------|---|----------------------------------|---|--|----------------------------|------------------------------|------------------------------|
| -    | -    | -                    | -         | -                      | THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. | DESIGNER/DRAFTER:<br><b>MD</b> | <br><b>STATE OF CONNECTICUT<br/>DEPARTMENT OF TRANSPORTATION</b> | SIGNATURE/<br>BLOCK:             | <br>Hardesty & Hanover, LLC<br>59 Elm Street<br>New Haven, CT 06510<br> | PROJECT TITLE:   | TOWN:                      | <b>HARTFORD</b>              | PROJECT NO.<br><b>63-699</b> |
| -    | -    | -                    | -         | -                      |   | CHECKED BY:<br><b>SDH</b>      |   | DRAWING TITLE:                   |   | <b>BRIDGE NO. 03160A-D, 3301 &amp; 3303 I-84 EB/WB OVER AMTRAK &amp; LOCAL ROADS (AETNA VIADUCT)</b> | <b>LIGHTING DETAIL - 1</b> | DRAWING NO.<br><b>LTG-07</b> |                              |
| -    | -    | -                    | -         | -                      |   | SCALE AS NOTED                 |   |                                  |   |  |                            | SHEET NO.<br><b>01.10.07</b> |                              |
| REV. | DATE | REVISION DESCRIPTION | SHEET NO. | Plotted Date: 7/5/2016 |   |                                |   | Filename: ...\\LTG-07_63-699.dgn |   |  |                            |                              |                              |
|      |      |                      |           |                        |   |                                |   |                                  |   |  |                            |                              |                              |



TYPICAL CONDUIT TREATMENT AT  
EXISTING CONCRETE HANDHOLE  
OR STANDARD FOUNDATION  
(TOP VIEW)



PARAPET PLAN  
SCALE: NTS



SECTION  
SCALE: NTS

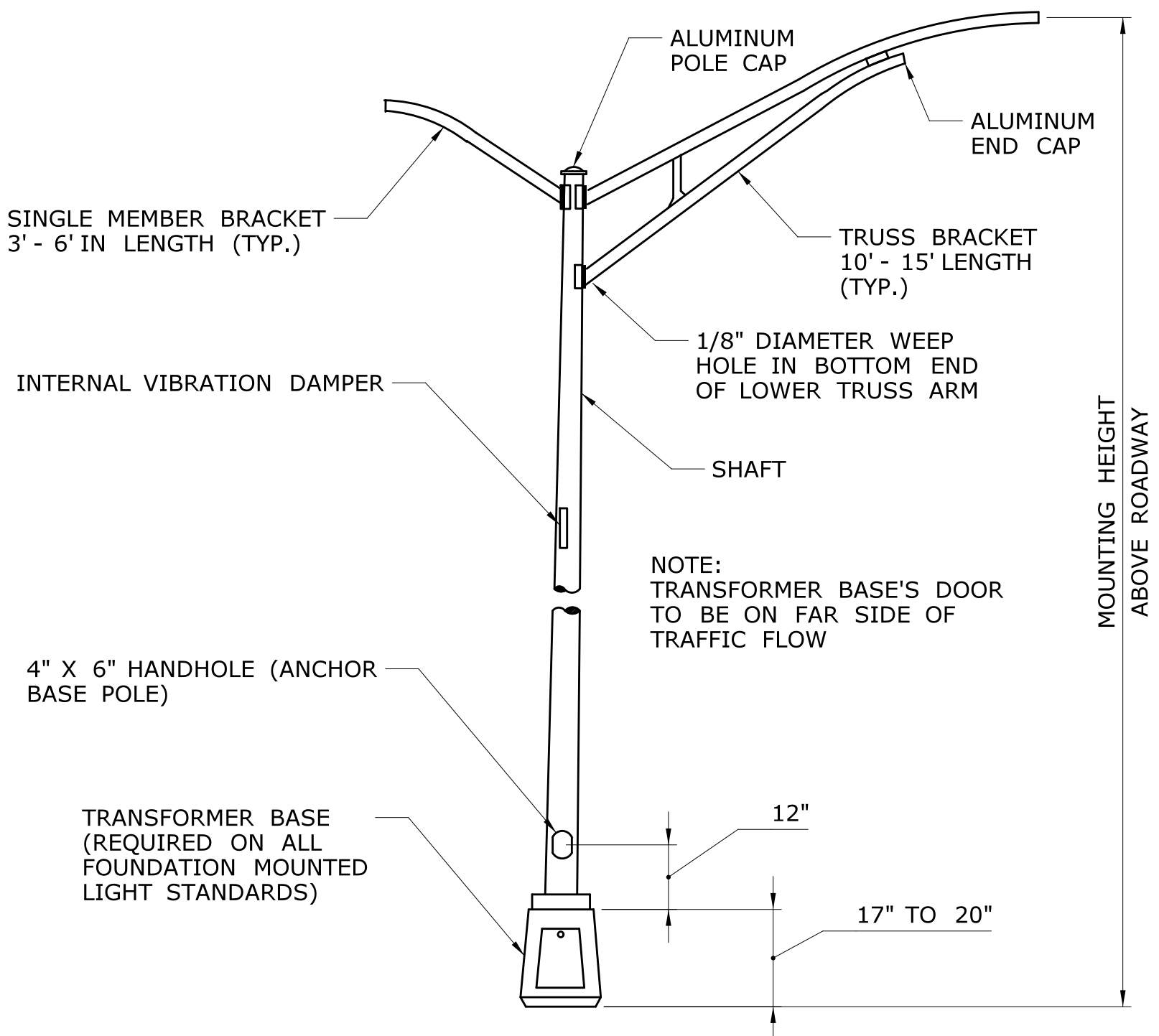
CONDUIT ATTACHMENT NOTES:

- SURFACE MOUNTED FIBERGLASS CONDUIT SUPPORT SPACING SHALL NOT EXCEED 3'-0" AS PER N.E.C. 352.30(B). WHEN THE FIBERGLASS CONDUIT LENGTH IS BETWEEN 50' AND 200' INSTALL TWO CONDUIT EXPANSION FITTINGS EQUALLY SPACED FROM EACH OTHER AND THE ENDS OF THE CONDUIT RUN. CONDUIT EXPANSION FITTINGS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURERS INSTALLATION GUIDELINES.
- CONDUIT EXPANSION FITTINGS (6" MOVEMENT) SHALL BE INSTALLED AT ALL BRIDGE EXPANSION JOINTS. A MINIMUM OF TWO CONDUIT EXPANSION FITTINGS SHALL BE INSTALLED BETWEEN EACH JUNCTION BOX AS INDICATED IN THE DETAILS. MAXIMUM SPACING BETWEEN ADJACENT EXPANSION FITTINGS SHALL NOT EXCEED 125'. BARREL END OF EXPANSION FITTING SHALL BE SECURELY CLAMPED TO THE PARAPET TO PROHIBIT MOVEMENT OF BARREL.
- EXPANSION FITTING PISTON OPENING AT THE TIME OF INSTALLATION SHALL BE DETERMINED BASED ON THE FOLLOWING FORMULA  
$$= \frac{100 \text{ F}^\circ - \text{AMBIENT TEMP.}}{100 \text{ F}^\circ} \times 6"$$
- ALL CONDUIT FITTINGS, COUPLINGS, CLAMPS, ATTACHMENT HARDWARE, DRILLING AND ANCHORING SHALL BE INCLUDED IN THE PRICE OF THE CONDUIT.

| ALUMINUM LIGHT STANDARD - DIMENSION TABLE |                |                |     |                      |           |                  |                      |
|---|----------------|----------------|-----|----------------------|-----------|------------------|----------------------|
| MOUNTING HEIGHT                           | BRACKET LENGTH | SHAFT DIAMETER |     | SHAFT WALL THICKNESS | BASE TYPE | ANCHOR BOLT SIZE | BOLT CIRCLE DIAMETER |
|   |                | BOTTOM         | TOP |                      |           |                  |                      |
| 40'                                       | 12'            | 10"            | 6"  | .219"                | ANCHOR    | 1"               | 15"                  |
|   |                |                |     |                      |           |                  |                      |
|   |                |                |     |                      |           |                  |                      |
|   |                |                |     |                      |           |                  |                      |
|   |                |                |     |                      |           |                  |                      |

LIGHT STANDARD NOTES:

- ALUMINUM ALLOY SHALL BE 6063, T6 TEMPER.
- BOLT CIRCLE SHOWN IS FOR ANCHOR BASE BOTTOM OR TRANSFORMER BASE BOTTOM (WHICHEVER IS APPLICABLE).
- TO BE DESIGNED TO AASHTO "STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 90 M.P.H. WINDS.
- WELDING DESIGN AND FABRICATION SHALL CONFORM TO THE LATEST EDITION OF THE ANSI/AWS D1.2, STRUCTURAL WELDING CODE - ALUMINUM.
- FOR BASE CONNECTION WELDS, FABRICATION INSPECTION AND TESTING SHALL BE PERFORMED AS NECESSARY PRIOR TO ASSEMBLY, DURING ASSEMBLY, DURING WELDING, AND AFTER WELDING, TO ENSURE THAT MATERIALS AND WORKMANSHIP MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FABRICATION INSPECTION AND TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFICATION INSPECTION AND TESTING IS THE PREROGATIVE OF THE ENGINEER (CONNDOT).
- NON-DESTRUCTIVE TESTING FOR ALUMINUM SHALL BE AS FOLLOWS: A RANDOM 25% OF ALL BASE CONNECTION WELDS SHALL BE INSPECTED IN ACCORDANCE WITH ASTM E-165 STANDARD PRACTICE FOR LIQUID PENETRANT INSPECTION METHOD.



ALUMINUM LIGHT STANDARD

| BOLT CIRCLE DIAMETER | BOLT SPACING                     |
|----------------------|----------------------------------|
| 15"                  | 10 <sup>5</sup> / <sub>8</sub> " |
| 17"                  | 12"                              |

|                      |   |   |   |   |   |                                 |   |   |   |   |   |
|----------------------|---|---|---|---|---|---------------------------------|---|---|---|---|---|
| REV. DATE            |   |   | REVISION DESCRIPTION  |   |   | SHEET NO.                       |   |   | Plotted Date: 7/5/2016  |   |   |
| -                    | - | - | -   | - | - | -                               | - | - | -   | - | - |
| -                    | - | - | -   | - | - | -                               | - | - | -   | - | - |
| -                    | - | - | -   | - | - | -                               | - | - | -   | - | - |
| -                    | - | - | -   | - | - | -                               | - | - | -   | - | - |
| -                    | - | - | -   | - | - | -                               | - | - | -   | - | - |
| -                    | - | - | -   | - | - | -                               | - | - | -   | - | - |
| -                    | - | - | -   | - | - | -                               | - | - | -   | - | - |
| DESIGNER/DRAFTER: MD |   |   | CHECKED BY: SDH   |   |   | SCALE AS NOTED                  |   |   | THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. |   |   |
| STATE OF CONNECTICUT |   |   | DEPARTMENT OF TRANSPORTATION  |   |   | File name: ...LTG-08_63-699.dgn |   |   | Hardesty & Hanover, LLC<br>59 Elm Street<br>New Haven, CT 06510<br>Hardesty & Hanover   |   |   |
| PROJECT TITLE:       |   |   | BRIDGE NO. 03160A-D, 3301 & 3303 I-84 EB/WB OVER AMTRAK & LOCAL ROADS (AETNA VIADUCT) |   |   | TOWN: HARTFORD                  |   |   | PROJECT NO. 63-699  |   |   |
| DRAWING TITLE:       |   |   | LIGHTING DETAIL - 2   |   |   | DRAWING NO. LTG-08              |   |   | SHEET NO. 01.10.08  |   |   |